

REMARKS/ARGUMENTS

Claims 1-13 and 15-16 are active in this case.

Claims 1-12 are amended for clarity and to improve readability.

Claim 13 is supported by the disclosure at page 9.

Claim 15 is supported by original Claim 10 and page 8, lines 11-12 of the disclosure.

Claim 16 is supported by original Claim 14 (which has been cancelled) and the disclosure at page 6 and page 10, 1st paragraph and lines 27-29.

The specification is amended to provide a brief description of the drawings, supported by the specification on page 14, 3rd and 4th paragraphs.

A substitute Abstract is also provided.

No new matter is believed to be added by these amendments.

The Examiner has also objected to Claims 4-14 because of the multiple dependency and has not examined these claims further. In addition, Claim 3 is rejected under 35 USC 112, second paragraph based on the differences between original claims 2 and 3. These issues are no longer applicable in light of the amended claims submitted in this paper and therefore withdrawal of the same is requested.

In the Official Action, the Examiner has rejected Claims 1-3 in view of U.S. patent no. 6,740,312 (Chopin et al). In addressing this rejection, Applicants submit a signed Rule 132 Declaration from Kai Schumacher. As stated in the Declaration, the uncoated titania particles of Example 1 described in US 6,740,312 (Chopin et al) were synthesized. It was found that at least some of the TiO₂ particles are aggregated, which means two or more of the particles are bound together. As these particles are used for the subsequent coating with silica, at least some TiO₂ particles are not completely coated with silica. The areas where two or more aggregated TiO₂ particles are bound together are not available for coating.

In contrast, the particles of the present invention are primary particles of titania coated with silica. As set forth on page 5, lines 5-7 of the application:

Primary particles are understood to denote very small particles that cannot be decomposed further without rupturing chemical bonds.

Thus, the particles claimed in the present invention differ from those disclosed in Chopin et al.

Moreover, Applicants point to the specification on pages 10-11, which describes the advantages of the discovery presented in the claims of this application:

The process according to the invention permits the production of titanium dioxide particles completely coated with silicon dioxide, wherein only minor amounts of silicon dioxide precursors are necessary. With known processes in which the production is carried out pyrogenically, substantially larger amounts of silicon dioxide precursors are necessary in order to achieve a complete coating. This in turn reduces the UV absorption of the powders according to the prior art.

The unique structure of the powder according to the invention, in which the primary particles already have a sealed coating, also means that, in the event of a possible aggregation of the primary particles, no aggregation of the titanium dioxide cores is possible. With the known powders, which are obtained by coating a titanium dioxide core in an aqueous medium, as a rule there is an aggregation of the initial titanium dioxide powders, or aggregated powders are used to start with. In these processes aggregates are thus coated, and not primary particles as in the case of the process according to the invention.

On the basis of the facts known from DE-A-4235996 it was not expected that a completely different powder would be formed by addition of secondary air under specifically defined ratios to

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the rest of the gases that are used. Whereas the process described in DE-A-4235996 leads to a mixed oxide powder with an homogeneous distribution of titanium dioxide and silicon dioxide, the process according to the invention produces a powder with a complete coating of silicon dioxide and a core of titanium dioxide.

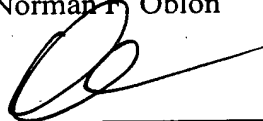
In view of the above, Applicants request withdrawal of the rejection based on Chopin et al.

A Notice of Allowance for all pending claims is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, he is encouraged to contact Applicants' undersigned representative.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Daniel J. Pereira, Ph.D.
Registration No. 45,518

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)